IN THE CLAIMS

1. (Currently Amended) A heat pump system comprising:

a fluid storage reservoir;

a heat pump having a heat exchanger, said heat pump having an on mode during which it circulates refrigerant through the heat exchanger, and an off mode during which it does not circulate refrigerant to the heat exchanger;

at least one reversible pump for pumping a fluid from the fluid storage reservoir to the heat exchanger and back to the fluid storage reservoir, wherein the at least one pump pumps the fluid in a first direction when the heat pump is in the on mode and pumps the fluid in a second direction, opposite the first direction, when the heat pump is in the off mode; and

a control for said pump to selectively control said pump to pump the fluid in the second direction when the heat pump is in the off mode.

2. (Original) The heat pump system of claim 1 wherein the fluid storage reservoir includes a hot section and a cold section, and wherein the at least one pump pumps the fluid from the cold section to the heat exchanger and from the heat exchanger to the hot section based upon the heat pump being on, and wherein the at least one pump pumps the fluid from the hot section to the heat exchanger and from the heat exchanger to the cold section based upon the heat pump being off.

3. (Original) The heat pump system of claim 2 wherein the fluid is water.

4. (Original) The heat pump system of claim 3 wherein the heat pump is located outdoors and the fluid storage reservoir is located indoors.

5. (Original) The heat pump system of claim 1 wherein the at least one pump is connected by fluid lines between the fluid storage reservoir and the heat pump.

6. (Currently Amended) A method for preventing freezing in a heat pump system including the steps of:

a) providing a heat pump for circulating refrigerant through a heat exchanger in an on mode, and not circulating refrigerant through the heat exchanger when in an off mode

b~~a~~) flowing a fluid from a fluid reservoir to a heat exchanger and back to the fluid reservoir in a first direction when the heat pump is on; and

c~~b~~) flowing the fluid in a second direction, opposite the first direction, when the heat pump is off.

7. (Currently Amended) The method of claim 6 wherein the fluid storage reservoir includes a hot section and a cold section, wherein said step b) ~~a)~~ further includes the step of flowing the fluid from the cold section to the heat exchanger and from the heat exchanger to the hot section based upon the heat pump being on, and wherein said step c) ~~b)~~ further includes the step of flowing the fluid from the hot section to the heat exchanger and from the heat exchanger to the cold section based upon the heat pump being off.

8. (Original) The method of claim 7 wherein the fluid is water.

9. (Original) The method of claim 7 wherein the heat pump is located outdoors and the fluid storage reservoir is located indoors.

10. (Currently Amended) A heat pump system comprising:

a water storage reservoir including a hot section and a cold section for storing water;

a heat pump having a heat exchanger located outdoors where the heat exchanger ~~it~~ is subject to freezing temperatures, said heat pump circulating refrigerant through the heat exchanger in an on mode, and not circulating refrigerant through the heat exchanger when in the off mode; ~~and~~

at least one reversible pump for pumping water from the water storage reservoir to the heat exchanger and back to the water storage reservoir, wherein the at least one pump pumps the water from the cold section to the heat exchanger and from the heat exchanger to the hot section when the heat pump is in the on mode, and wherein the at least one pump pumps the water from the hot section to the heat exchanger and from the heat exchanger to the cold section when the heat pump is in the off mode; and

a control for said pump to selectively control said pump to pump the water in the second direction when the heat pump is in the off mode.

11. (Original) The heat pump system of claim 10 wherein the at least one pump pumps the water in a first direction from the cold section to the heat exchanger and from the heat exchanger to the hot section, and wherein the at least one pump pumps the water in a second direction, opposite the first direction, from the hot section to the heat exchanger and from the heat exchanger to the cold section, and wherein the at least one pump switches between pumping water in the first direction and pumping water in the second direction based at least in part upon a temperature of the water.

12. (Original) The heat pump system of claim 11 wherein the at least one pump switches between the first direction and the second direction based at least in part upon whether the heat pump is on or off.

13. (New) The heat pump system of claim 1, wherein a temperature sensor senses an ambient outdoor temperature, and said temperature sensor sending a signal to said control, said control only operating said pump to pump fluid in the second direction when the sensed temperature is below a predetermined limit.

14. (New) The heat pump system of claim 10, wherein a temperature sensor senses an ambient outdoor temperature, and said temperature sensor sending a signal to said control, said control only operating said pump to pump water in the second direction when the sensed temperature is below a predetermined limit.

15. (New) The method of claim 6, wherein step (c) only occurs if an ambient temperature is determined to be below a predetermined level.